# Joseph Matthew Clampitt

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# Education

Ph.D. Physics, University of Pennsylvania, May 2014

Advisor: Bhuvnesh Jain, Department of Physics and Astronomy Thesis: Weak Lensing and Modified Gravity of Cosmic Structure

B.S. Physics (Honors), Purdue University, 2009 Summa Cum Laude

Research Experience

Postdoctoral Researcher, Advisor: Bhuvnesh Jain 2014—present

University of Pennsylvania

Research Assistant, Advisor: Bhuvnesh Jain 2010—2014

University of Pennsylvania

Undergraduate Research Assistant, Advisor: Ian Shipsey 2007—2009

Purdue University

Research Experience for Undergraduates, Advisor: Jose Lazo-Flores Summer 2008

CERN (European Council for Nuclear Research)

Research Experience for Undergraduates, Advisor: Mark Messier Summer 2007

Indiana University

# **Publications**

Adhikari, Dalal, **Clampitt** "Observing Dynamical Friction in Galaxy Clusters" arxiv:1605.06688

Sanchez, Clampitt, Kovacs, et al. "Cosmic Voids and Void Lensing in the DES Science Verification Data" arxiv:1605.03982

Fang, Clampitt, Dalal, et al. "Tidal Stripping as a test of Satellite Quenching in redMaPPer Clusters" arxiv:1604.08611

Kwan, Sanchez, **Clampitt**, et al. "Cosmology from Large Scale Galaxy Clustering and Galaxy-Galaxy Lensing with Dark Energy Survey Science Verification Data" arxiv:1604.07871

Clampitt, Sanchez, Kwan, et al. "Galaxy-Galaxy Lensing in the DES Science Verification Data" arxiv:1603.05790

Baxter, **Clampitt**, Giannantonio, et al. "Joint Measurement of Lensing-Galaxy Correlations Using SPT and DES SV Data" arxiv:1602.07384

**Clampitt**, Jain "Lensing Measurements of the Ellipticity of LRG Dark Matter Halos" MNRAS 457, 4135 (2016)

Clampitt, Miyatake, Jain, Takada, "Detection of Stacked Filament Lensing Between SDSS Luminous Red Galaxies" MNRAS 457, 2391 (2016)

Clampitt, Jain, Sanchez "Clustering and Bias Measurements of SDSS Voids" MNRAS 456, 4425 (2016)

The Dark Energy Survey Collaboration, et al. "Cosmology from Cosmic Shear with DES Science Verification Data" arxiv:1507.05552

Jarvis, et al. "The DES Science Verification Weak Lensing Shear Catalogues" MNRAS accepted, arxiv:1507.05603

Park, et al. "Joint Analysis of Galaxy-Galaxy Lensing and Galaxy Clustering: Methodology and Forecasts for DES" arxiv:1507.05353

Clampitt, Jain "Lensing Measurements of the Mass Distribution in SDSS Voids" MNRAS 454, 3357 (2015)

Lam, Clampitt, Cai, Li "Voids in Modified Gravity Reloaded: Eulerian Void Assignment" MNRAS 450, 3319 (2015)

Melchior, et al. "Mass and galaxy distributions of four massive galaxy clusters from Dark Energy Survey Science Verification data" MNRAS 449, 2219 (2015)

Clampitt, Cai, Li "Voids in modified gravity: excursion set predictions" MNRAS 431, 749 (2013)

Clampitt, Jain, Khoury "Halo scale predictions of symmetron modified gravity" JCAP 1, 30 (2012)

# Invited Talks and Sessions Coordinated

Coordinated session at Dark Energy Survey SLAC meeting	May 2016
"Galaxy-galaxy Lensing Tests and Projects"	•

Coordinated session at Dark Energy Survey Madrid meeting	October 2015
"Galaxy-galaxy Lensing Projects in Year 1 Data"	

Invited talk at Kavli IPMU, Chiba, Japan	July 2015
"Halo Ellipticity with Weak Lensing"	·

Invited talk at Princeton University, Princeton, NJ	December 2014
"Lensing Measurements of SDSS Voids"	

Berkeley Cosmology Seminar, Berkeley, CA	October 2014
"Lensing Measurements of SDSS Voids and Filaments"	

Coordinated session at Dark Energy Survey (DES) Sussex meeting	October 2014
"Galaxy-galaxy Lensing in Science Verification Data"	

Invited talk at Cosmic Voids workshop, Columbus, OH	August 2014
"Weak Lensing Mass Profiles of SDSS Voids	· ·

Invited talk at American Physical Society meeting, Savannah, GA	April 2014
"Weak Lensing with the Dark Energy Survey	•

Coordinated session at Dark Energy Survey (DES) Barcelona meeting	October 2013
"Galaxy-galaxy Lensing in Science Verification Data	

Coordinated session at DES Lensing plus Structure meeting, Fermilab	May 2013
"Galaxy-galaxy Lensing in Simulations"	•

Coordinated session at DES Lawrence Berkeley National Lab meeting	April 2013
"Galaxy-galaxy Lensing in Early Cluster Data"	•

Co-coordinated two sessions at DES Texas A&M meeting	December 2012
"Topics in Galaxy-galaxy Lensing" and	
"Combined Probes: Lensing plus Structure"	

# Other Talks and Posters

Durham University: Ripples in the Cosmos

"Voids in Modified Gravity: Excursion Set Predictions"

July 2013

Dark Energy Survey Munich meeting "Galaxy-galaxy Lensing: DES Forecasts and Baryon Systematics"	May 2012
East Coast Gravity Meeting "Halo Scale Predictions of Symmetron and Chameleon Gravity"	April 2012
CERN Summer Student presentations, Meyrin, Switzerland "Displays for the CMS Beam Conditions and Radiation Monitoring System"	July 2008
Purdue Undergraduate Research Poster Symposium "Image Distortions Due to Variations in Camera Flatness for the Large Synoptic Survey Telescope"	March 2008
Argonne Undergraduate Research Symposium "Transfer Matrix Method for Using the NovA Surface Detector to Measure the Neutrino Spectrum at MINOS"	November 2007
Purdue Undergraduate Research Poster Symposium "Testing the Compact Muon Solenoid Forward Pixel Detector" Winner of College of Science Dean's Award	March 2007
Service and Awards Refereed for journals JCAP and MNRAS Coordinated DES galaxy-galaxy lensing subgroup Public outreach on cosmic voids at COSI, Columbus, OH Zaccheus Daniel Foundation for Astronomical Science Fellowship Organized University of Pennsylvania weekly Astrophysics Journal Club College of Science Dean's Award, Purdue Undergraduate Poster Symposium	2015 – present 2013 – 2016 August 2014 2012—2013 2011—2012 2007
Refereed for journals JCAP and MNRAS Coordinated DES galaxy-galaxy lensing subgroup Public outreach on cosmic voids at COSI, Columbus, OH Zaccheus Daniel Foundation for Astronomical Science Fellowship Organized University of Pennsylvania weekly Astrophysics Journal Club	2013 – 2016 August 2014 2012—2013 2011—2012
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Refereed for journals JCAP and MNRAS Coordinated DES galaxy-galaxy lensing subgroup Public outreach on cosmic voids at COSI, Columbus, OH Zaccheus Daniel Foundation for Astronomical Science Fellowship Organized University of Pennsylvania weekly Astrophysics Journal Club College of Science Dean's Award, Purdue Undergraduate Poster Symposium  Teaching Experience Mentored PhD and undergraduate physics students including Yuedong Fang, Charles Davis, and Andrew Neil  Guest lecturer, University of Pennsylvania	2013 – 2016 August 2014 2012 – 2013 2011 – 2012 2007 2013 – present

# **References**

## Dr. Bhuvnesh Jain

Edmund J. and Louise W. Kahn Term Chair in the Natural Sciences Professor, Department of Physics and Astronomy University of Pennsylvania 209 South 33rd St. Philadelphia, PA 19104 +1 (215) 898-2010 bjain@physics.upenn.edu

## Dr. Masahiro Takada

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# Dr. Sarah Bridle

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CV Last Updated June 2016